

REMARKS

Claims 1 and 2 have been amended. Support for the amendment to claims 1 and 2 is found, for example, in the specification on page 12, lines 23-24, on p. 87, Table 1, and on p. 113, Table 4. Therefore, no new matter is presented. Upon entry of the Amendment, claims 1-12 and non-elected claims 13-20 will be pending in the application.

I. Response to Claim Rejection under 35 U.S.C. § 112

Claims 1-12 were rejected under 35 U.S.C. § 112 second paragraph as being indefinite. In accordance with the Examiner's proposal, the term "core/shell structure" has been introduced to claims 1 and 2. Further, the amount of the metal other than iridium and the portion containing the metal other than iridium are described in amended claims 1 and 2, in accordance with the Examiner's request. Therefore, Applicant respectfully submits that the rejection has been overcome.

II. Response to Claim Rejections Under 35 U.S.C. § 103

A. Ikari in view of Wey et al. and JP2000-066325

Claims 1-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Ikari, Wey et al. and JP2000-066325.

As clarified in the Declaration submitted on August 23, 2005, the photothermographic material of the presently claimed invention has image storability which is unexpectedly superior to the image storability of the photothermographic material of Ikari which contains Ir mainly in the shell portion. In the Office Action, the Examiner states that the Declaration is not commensurate with the scope of the claimed invention. However, Applicant

respectfully submits that the Declaration is commensurate with the scope of the presently claimed invention.

Claims 1 and 2 have been amended to recite that the metal other than Ir is selected from iron, copper, rhodium and ruthenium. Further, as is clarified by the amendment, it is not necessary that a physical boundary be present between the core portion and the shell portion. The core portion defines the spatial area that provides the basis for the calculation of the Ir content, which is not necessarily a physical core. The disclosure of the entire specification supports that the core portion is not necessarily a physical core, but is merely a conceptual spatial area used for defining the scope of the claimed invention. For example, the examples within the scope of the invention described in Tables 1 and 4 of the specification have cores of various proportions (for example silver halide-7 according to the invention shown in Table 1 on p. 87 contains 90 % of Ir in its core corresponding to 30 % of the total mol% of silver halide). Therefore, it is clear that the proportion of the physical core is variable and not fixed as long as 90 % or more of a total iridium amount is contained in a conceptual core portion corresponding to 50 % of the total mol% of silver halide in the grain. Accordingly, the physical core of 30 % or 25 % used in the experiments described in the Declaration is within the scope of amended claim 1 since the Declaration clearly states that 90 % or more of a total iridium amount is contained in a (conceptual) core portion corresponding to 50 % of the total mol% of silver halide in the grain. The experiments described in the Declaration are also within the scope of amended claim 2.

Further, in the Response filed on August 23, 2005, Applicant pointed out that Ikari does not specifically describe the region to be doped with Ir. In the Examples of Ikari, Ir is doped in a shell corresponding to 30 to 100 mol% of silver halide in the grain. Such a distribution of Ir is outside the scope of the presently claimed invention because only about 29 % of the total Ir amount is contained in the core portion corresponding to the 50 % of the total mol% of silver halide of the grain. Wey et al. teaches a photographic material which is developed with a liquid developer. Accordingly, the photographic material of Wey et al. does not comprise components which are necessary for enabling heat development. Further, the heavy metal is doped as a sensitizer in Wey et al. In contrast, photothermographic materials uniquely have a problem of so-called printout, which refers to fogging over time caused by the silver halide which remains in the photothermographic materials after heat development. Since the photographic material of Wey et al. is developed by a conventional liquid developer, Wey et al. does not suggest that the doping with heavy metals suppresses printout. JP-A No. 2000-066325 does not suggest the suppression of printout, either. The Examiner did not provide any counterargument regarding these matters. Therefore, it is respectfully requested that the Examiner clarify his position toward these arguments.

Accordingly, the Applicant respectfully submits that the combination of Ikari, Wey et al. and JP-A No. 2000-066325 neither teaches nor suggests the presently claimed invention.

B. Ikari in combination with Wey et al, JP-A No. 2000-066325, and Farid et al.

Claim 10 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over the combination of Ikari, Wey et al., JP-A No. 2000-066325, and Farid et al.

Claim 10 depends from claim 1, and the invention of claim 1 is not obvious from the combination of Ikari, Wey et al. and JP-A No. 2000-066325, as described above. Farid et al. does not teach that the doping with heavy metals suppresses printout or unexpected effects achieved thereby. Therefore, the combination of Ikari, Wey et al., JP-A No. 2000-066325, and Farid et al. still fails to teach or suggest the invention of claim 1, and claim 10 is also considered patentable because of its dependency.

C. Zou

Claim 1, 2, 11, and 12 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Zou.

Zou teaches doping of silver halide with Ir and Cu. However, Zou does not disclose the specific distribution of Ir within the grain described in claim 1 of the present application. Zou teaches neither the Ir doping with a specific distribution described in the presently claimed invention nor the improvement of image storability achieved by the Ir doping. Further, the photothermographic material of the invention has image storability which is unexpectedly superior to the image storability of the photothermographic materials using the emulsion samples C and D disclosed in Zou, as is clarified in the Declaration submitted on August 23, 2005. Since the

Declaration is commensurate with the scope of the invention as described in the above item A, the Applicant respectfully submits that Zou neither teaches nor suggests the presently claimed invention.

In conclusion, the claimed invention is novel and cannot be obtained based on the disclosure of prior art references.

In view of the foregoing amendments and remarks, it is submitted that all of the claims currently pending in the application are in condition for allowance. Early and favorable action is respectfully requested.

Respectfully submitted,



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Date: June 2, 2006